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ABSTRACT

At a public community college located in a Southeastern state, an innovative curriculum, including contracting, individualization and cooperative learning, was tested in two sections of a History of Western Civilization course. Contracting refers to an agreement between teacher and student, specifying student goals and objectives. Individualization allows students to select from such learning methods as tests, book reports, or papers. Cooperative learning refers to the use of student study groups before each test. In each section, students were given a highly detailed syllabus explaining the grading system that made it possible for students to earn points by taking tests, writing book reports, or completing term papers. A study of student outcomes and attitudes toward the three elements indicated the following: (1) 79% (n=27) of one section and 50% (n=15) of the other failed to achieve their contract goals in terms of final grades; (2) over 50% of both sections failed to meet their book report objectives and over 40% of both failed to meet their term paper objectives; (3) in general, many students in both groups exhibited high grade expectations teamed with low objectives; and (4) despite the failures, student attitudes toward the curriculum were typically "very positive" or "positive." The study concluded that, while students recognize the value of setting goals, they may not follow their own contracts. Tables, the student evaluation questionnaire, and 23 references are appended. (KP)

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Elements of Contracting, Individualization, and Cooperative Learning in a Community College History Classroom

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Elements of Contracting, Individualization, and Cooperative Learning in a Community College History Classroom

ABSTRACT

Among the methods of instruction available to the community college history instructor are contracting, individualization, and cooperative learning. An innovative curriculum, including elements of these three methods, was tested at a Southeastern public community college. A study was conducted to determine the extent to which the students were successful in completing their contracts, their attitudes toward the three major design elements of the curriculum, and the extent to which the students participated in voluntary cooperative learning. Two sections of History of Western Civilization, one with 38 students and the other with 31 students, were the subjects of this study.

79% of one section and 50% of the other failed to attain their contract goal, in terms of their final grade. In terms of specific contract objectives, the range of failures across the two sections was 40% - 56%. Despite these failures, student attitudes toward the curriculum were typically "Very Positive" or "Positive", and the subjects displayed an understanding of the purposes and methods of this curriculum design. 89% of the respondents in one section and 86% in the other said that they participated in more than half of the voluntary cooperative learning group sessions.

Elements of Contracting, Individualization, and Cooperative Learning in a Community College History Classroom

Community college instructors should be responsive to individual students' learning needs and styles. Sternberg (1990) took the position that learning styles are individual and important; understanding them is as necessary as understanding varying student ability, and serving them is a vital part of a teacher's role. As Sternberg explained, the variety of student learning styles means that some learn best by listening to lectures, while others benefit more from group learning situations, and others learn the most through inquiry techniques. Among the methods of instruction available to the community college history instructor are contracting, individualization, and cooperative learning. These methods provide means of goal-setting that may reduce student procrastination, ways of varying types of learning opportunities, and designs for increasing student participation. These ways of helping learning to happen are not mutually exclusive; for example, a course contract between the student and the instructor may well include participation in cooperative learning and utilization of elements of individualized instruction.

A theoretical foundation for these curriculum designs can be found in the Piagetian formulation of constructivism.

According to Narode (1983), Piaget advocated, as the role of the learner, actively inventing concepts rather than passively accepting information. The goal-setting of contracting, the student-centered aspects of individualization, and the group participation of cooperative learning fit well within Piaget's concept of the active learner. Koch (1992) drew from the work on constructivism by von Glasersfeld (1983) in designing a teaching model to be utilized in a higher education setting. Her model made the student the center of the learning process, with cooperative learning groups as the primary structure for learning. Her model also included several elements of individualization, including the use of teacher explanations, student tutors, and well-developed instructional materials for individual use. Thus, a student-centered curriculum design, founded in constructivism and drawing from contracting, individualization, and cooperative learning, can be found in the research and experiences reported in the literature.

Contracting

Gross and Gross (1980) described contracts in terms of their constituent parts: (a) the student's general purposes, or goals; (b) the student's specific goals, or objectives; (c) learning activities to be undertaken by the student, with the aid of the instructor; (d) methods and criteria for evaluation. Fuhrmann and Grasha (1983) were joined by McKeachie (1986) in pointing out that evaluation of performance must place an

emphasis on quality as well as quantity; otherwise, the accumulation of points for activities completed will replace learning as the students' purpose. Therefore, each activity specified within the contract must not only be completed, but must also meet reasonably high standards of performance; it is vital that these standards are a part of the contract.

Lamwers, Jazwinski, and LaLonde (1985) noted the reducing effect contracting has on student procrastination. However, Burkett and Darst (1979) stated that some students prefer to be more passively involved in the process and prefer a more traditional course structure. In other words, some students will react positively to the opportunity to focus on and achieve goals they helped set, while others prefer that the instructor make all decisions about content, activities, and scheduling.

As used in this study, contracting refers to an agreement between teacher and student, specifying the student's goals and objectives. The student selected a grade as a goal, and selected objectives (tests, book reports, a paper) that enabled him or her to achieve that goal. In the application of the subject curriculum, there was no penalty for changing a contract or failing to complete it. Therefore, the legalistic-sounding term "Contract" was avoided; instead, the term "Student Learning Plan" was used.

Individualization

One of the most influential plans for individualizing

instruction has been Keller's Personalized System of Instruction (PSI), often referred to as the "Keller Plan". Keller (1968) suggested a plan with five features that may distinguish it from more conventional teaching: (a) individually paced; (b) mastery oriented; (c) student-tutored; (d) uses printed study guides for communication of information; and (e) includes a few lectures to stimulate and motivate students. Those who support the concept and the resultant practices find individualization to be more student centered, taking into account variations in styles of learning, learning skills, and learning speed. A frequently cited work on individualization is that of K. P. Cross (1976). She made clear her belief that teachers must take into account differences in students, in terms of their pace and ways of learning. McDaris (1985) studied the effects of frequent testing, a common feature of many types of individualized instruction. She conducted a pilot study to compare the results of giving three short tests in the place of one long test; she also studied student attitudes about test frequency. She found that performance was significantly higher for the three-test group, and that students preferred frequent tests. On the use of student tutors, McKeachie (1986) concluded that students can often be more candid with each other than with an instructor, and this should enhance the learning process; he also pointed out that teaching is a good way of learning.

It must be noted that concerns about the universality of

PSI and other forms of individualized instruction have been expressed by more than one authority. Cornwall and Higgs, in Boud (1988), as well as Good and Brophy (1991) expressed concerns about the ability of young college students to deal with the freedom (and therefore, the self-discipline) inherent in many schemes of individualized instruction. They caution that care must be taken to ensure that these students truly understand the roles of both themselves and their teachers in individualized instruction. Without adequate study skills and a self-concept of themselves as effective and efficient learners, some students may become lost in a sea of confusion and procrastination.

As used here, individualization refers to allowing students to select various ways of learning: they could employ any combination of tests (based on the textbook), book reports, or a paper. Other frequently-encountered features of individualization, such as frequent testing, lectures to stimulate and motivate, and student interaction, were also employed. However, it must be noted that the curriculum studied for this report is not a "pure" example of PSI or any other model; rather, it is a hybrid, informed by the works of Keller (1968) and others.

Cooperative Learning

Cooperative learning is based on the simple but powerful supposition that many students will learn better by learning

together. Slavin (1990), in a widely-quoted work that is focused on K-12 applications but is often utilized by community college curriculum authorities such as Johnson and Johnson (1991), described cooperative learning techniques that stress both team interaction and individual responsibility. Magid (1988) found that students who participated in group study sessions displayed a higher level of individual achievement. McDougall and Gimple (1985) discovered that cooperative learning, when used in community college classrooms, resulted in goals clarification and enhanced individual learning and satisfaction. They concluded that cooperative learning was more conducive to student satisfaction and productivity than competition.

In recent years, a number of noted authorities have turned their attention to the use of cooperative learning in the college classroom. Johnson, Johnson, and Smith (1991a, 1991b), as well as Cooper et al. (1990) have provided a wealth of information useful to the community college instructor seeking to use cooperative learning. Smith (1993) and Cooper, McKinney, and Robinson (1991) are useful as brief discussions of cooperative learning and, especially, as bibliographies for those in search of other sources. All of these recent works were very useful to the researcher in designing the curriculum studied herein.

As used here, cooperative learning refers to the group

study sessions conducted just before each test. Students were allowed to form their own groups, but they were encouraged to form groups with three to five members. Participation was optional, but was regularly recommended. Although test grades were individual (there were no group grades), the students were reminded that, by helping others, they could often better prepare themselves. It should be underlined that this plan for cooperative learning did not include required participation, heterogeneous grouping, or group grades, practices advocated by Johnson and Johnson (1991) and Slavin (1990). These omissions were not accidental; one purpose of this study was to determine the extent to which the subjects would voluntarily engage in cooperative learning and what the resultant performance and attitudes might be.

Curriculum Design for this Study

The courses for this study were both designed in keeping with the applications of contracting, individualization, and cooperative learning described above. History 101 is a course in the History of Western Civilization, from the beginning of recorded history through the Reformation. History 102 is a course beginning with the Post-Reformation period and concluding in the present. For each course, the students were given a highly detailed syllabus. This syllabus explained the grading system, which permitted the students to earn points by taking tests, writing book reports, or completing a term paper. Tests

were based on the textbook, as enhanced by lectures and occasional video tapes. Cooperative learning, in the form of group study, was encouraged. Voluntary groups could study together, in class, for 45 minutes prior to taking the test. Students who so wished were allowed to study alone. All students were required to complete a Student Learning Plan, in which they spelled out their course goals and the means they would employ (tests, book reports, term paper) in achieving their goals.

PURPOSE OF THE STUDY

The purpose of this study was to evaluate the curriculum described above. In particular, the researcher sought answers to the following three questions:

1. To what extent did the students complete the objectives and attain the goals they set out for themselves in their Student Learning Plans?
2. What were student attitudes toward the design and conduct of the course, especially as they related to contracting, individualization, and cooperative learning?
3. To what extent did the students participate in the voluntary cooperative learning groups?

METHOD

This study was conducted at a public community college, located in a Southeastern state, during a Winter term that began in December, 1992, and ended in March, 1993. The subjects were

students who completed the course in one of two sections of history: History 101, with 38 students, and History 102, with 31 students. Data were drawn from Student Learning Plans (Appendix A), the instructor's grade book, and the History of Western Civilization Questionnaire (Appendix B). In order to protect their privacy, students were not required to identify themselves when completing the questionnaire.

DISCUSSION OF RESULTS

Student Achievement of Goals

Table 1 shows that, other than taking tests as planned, the History 101 students were not very faithful to their plans. 79% failed to achieve their grade goals. Furthermore, of the 34 students (out of 38) who properly completed the Student Learning Plan, fully 24 indicated a grade goal of "A"; only 6 of the total of 38 students actually achieved this goal. Clearly, these students either had inflated opinions of their abilities and self-motivation, or they simply indicated the best-possible grade without thinking through what they actually could and would strive to do.

Further light is shed by a consideration of their failure to meet their book report objectives (56%) and their term paper objectives (47%). These statistics become even more indicative of a lack of student motivation when it is noted that many of the students never planned to do any point-earning work other than take tests; of the 17 who met their term paper goal, 13 had

a goal of "none".

The History 102 students also had problems in achieving their objectives and goals. Half of them did accurately predict their final grade, but 15 of the 30 who completed the Student Plan expected an "A", while only 9 of the 31 who completed the course actually earned an "A". As for their book report and term paper objectives, the pattern of high grade expectations teamed with low objectives was repeated; again, it must be noted that many (13 of 30) students in History 102 had no intention of earning the 10 points available to them by completing a term paper. Yet, 29 of the 30 who completed a Student Plan expected to earn an "A" or a "B".

Student Attitudes Toward Curriculum Elements

Table 2 clearly shows that the History 101 students had a good opinion of having choices of ways to earn grades and of having 5 tests rather then some lesser number. 25 of 27 respondents had a "Very Positive" or "Positive" opinion of having choices; 23 of 27 clearly liked having 5 tests. And, 21 of them felt that enough time was allowed for completing the course options.

As for specific elements of the course (cooperative study sessions, the text book, lectures, videotapes), opinions again were heavily biased toward the "Very Positive" and "Positive" end of the scale. Only their opinion of the video tapes was less enthusiastic; 13 reported "Very Positive/Positive", 7 were

neutral, and 7 were at the negative end of the scale. Comments about the video tapes included: "Boring", "Repetitive", and "Low student attention". A major concern of the students was the accent of the narrator on the video tapes; his Eastern European accent seemed to first amuse, then distract them, and several commented on this.

The History 101 students' comments on the Student Learning Plans showed that they recognized goal-setting and self-motivation as the purpose of these plans, and 26 of the 27 respondents felt that the Student Plans were "Very Positive" or "Positive". Yet, a majority of the respondents admitted that they failed to complete their plans, citing "time" as their major problem; a few were more forthright, identifying "procrastination" as their reason for not completing their objectives. By the end of the course, when they completed the questionnaire, these 27 students also had lower grade expectations; 16 expected a "B", with only 4 expecting an "A".

According to Table 3, the History 102 students expressed opinions very similar to those of the History 101 students. They, too, were enthusiastic in their opinions of contracting, individualization, and cooperative learning. They also liked the number of tests and the lectures. Like their counterparts, they were reserved in their opinion of the video tapes, again mentioning that they had problems with the speaker's accent and reporting themselves bored in general. And, they also described

various time problems in explaining why a majority of them failed to complete their plans.

Participation in Cooperative Learning Groups

Tables 2 and 3 show that most students reported participation in the study groups. In History 101, 24 of 27 respondents reported participation in 3 or 4 of the first 4 group sessions, and these 24 planned to participate in the final study session. In History 102, 19 of 23 respondents said that they participated in at least 3 sessions; 20 planned to join a voluntary study group in preparation for the final test.

CONCLUSIONS AND IMPLICATIONS

This study led the researcher to the inescapable conclusion that these students could recognize the value of having learning choices and of setting goals; they discussed these concepts in a way that indicated both comprehension and appreciation. Yet, they had very significant problems in achieving their own objectives and goals. Why? Perhaps their wildly optimistic grade expectations provide a clue; these students, especially the History 101 students, could not seem to focus on their own abilities and ambitions. They seemed to be saying "I would like to make an A", but they failed to take the necessary steps to do so. In other words, they seemed to consider a wish to be a goal. According to them, many could never find the time to achieve the necessary objectives to make the wish come true. Their "Very Positive" and "Positive" opinions of the elements of

the course showed that they found little fault with their opportunity to make an "A". Indeed, many of them ended their comments with words of appreciation for the way the course was conducted, linked with a rueful statement that they wished they had possessed the self-motivation to take full advantage of the opportunity to follow their own plan to an "A".

There are implications for practice here. Most of these students did appreciate the opportunity to choose among ways of learning. Their lack of success in taking advantage of them was problematical, but the positive attitude these choices engendered may appear to some to be justification enough for providing such choices. In addition, the results indicate that the practice of giving frequent tests was supported by this study, as it is in much of the literature on the subject of test frequency.

As for the elements of cooperative learning built into this particular curriculum, the researcher noted that some students liked to study in groups, some did not, but most appreciated having the choice and did participate. Again, choice generated positive attitudes. Further study is needed, beyond the scope of this study, to determine if mandatory participation, heterogeneous grouping, and group grades will result in more effective cooperative learning; the literature indicates that such would be the case.

The Student Learning Plans seemed to be of rather

little practical value; too few were followed to make a case for their use. It may well be that demographic factors and student variables beyond the scope of this study had a significant bearing here; more research is needed here, as well. But one implication is clear; although there is a wealth of literature supporting the use of contracts, this study gives the community college instructor reason to not rush blindly into using them. The fact that students can recognize the value of setting goals does not necessarily mean that they will be able to apply themselves to following their own contracts.

Table 1

Completion of Student Learning Plans by 34 History 101 Students

Original Objective	Met Goal	Failed to Meet Goal	Exceeded Goal	% Failed to Meet Goal
Tests	32	2		6%
Book Reports	12 (4)	19	3	56%
Term Paper	17 (13)	16	1	47&
Final Grade	4	27	3	79%

Completion of Student Learning Plans by 30 History 102 Students

Tests	29	1		3%
Book Reports	10 (7)	16	4	53&
Term Paper	17 (13)	12	1	40%
Final Grade	15	15		50%

A number in parentheses indicates a goal of "none". In these cases, none completed was therefore reported as "Met Goal"; if a book report or term paper was completed by a student who planned none, it was reported as "Exceeded Goal".

Grade Goals Indicated on Student Plans:

History 101:	History 102:
A = 24	A = 15
A or B = 4	A or B = 1
B = 6	B = 13
C = 0	C = 1

Table 2

Questionnaire Responses from 27 Members of History 101

Opinion of...	Very Positive	Positive	Neutral	Negative	Very Negative
Choice	14	11	2		
Number of tests	17	6	4		
Completion dates	12	9	6		
Group study	17	5	5		
Textbook	14	4	5	1	
Lectures	14	12		1	
Video tapes	6	7	7	5	2
Student plans	11	15		1	

Number of Tests Taken: 4 tests = 27

Plan to Take Fifth Test: Yes = 27

Study Group Participations: 0 = 3, 3 = 4, 4 = 20

Plan to Participate in Last Study Group: Yes = 24, No = 3

Book Reports Completed: 0 = 10, 1 = 10, 2 = 6

Term Paper Completed: Yes = 4, No = 22

Student Plan Completed: Yes = 7, No = 17, "Maybe" = 2

Grade Expected: A = 4, B = 16, C = 5, "Pass" = 1

One student failed to respond on last 4 items.

Table 3

Questionnaire Responses from 23 Members of History 102

Opinion of...	Very Positive	Positive	Neutral	Negative	Very Negative
Choice	13	5	5		
Number of tests	12	8	2	1	
Completion dates	10	8	5		
Group study	17	4	1	1	
Textbook	7	9	7		
Lectures	12	10		1	
Video tapes	3	6	10	2	1
Student plans	6	10	7		

Number of Tests Taken: 4 tests = 23

Plan to Take Fifth Test: Yes = 23

Study Group Participations: 0 = 3, 2 = 1, 3 = 1, 4 = 18

Plan to Participate in Last Study Group: Yes = 20, No = 2

Book Reports Completed: 0 = 11, 1 = 9, 2 = 3

Term Paper Completed: Yes = 3, No = 20

Student Plan Completed: Yes = 7, No = 16

Grade Expected: A = 8, B = 8, C = 5, D = 1

Some students failed to respond to some items.

Appendix A

STUDENT LEARNING PLAN

I,

_____

(please **print** your name)

hereby state my intentions to achieve the following goals during this course.

STUDENTS MAY MODIFY THEIR PLAN DURING THE TERM.

Tests: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Check each test that you intend to take.

Cooperative Study: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

Check each cooperative study session that you intend to participate in.

Book Reports: 1 _____ , or 2 _____

Check the number of book reports that you intend to complete.

Term Paper: _____

Check if you intend to complete a term paper.

I intend to earn the grade of _____ .

Student Signature

_____

Date _____

Instructor Signature

_____

Date _____

Appendix B

HISTORY OF WESTERN CIVILIZATION QUESTIONNAIRE

Some questions will ask you to respond on a 5-part scale, from "very positive" to "very negative", or any point in between. For example, if you wish to indicate that your opinion of an idea is "positive", but less than "very positive", you might mark the scale as follows:

very positive	positive	neutral	negative	very negative
_____	X	_____	_____	_____

If there is not enough space for your explanations, you may write on the back of the page. If you do so, be sure to indicate which question you are answering.

.....

1. In order to earn points for a grade, you had three options to choose from: tests, book reports, and/or a term paper. What is your opinion of making your own choices about how to earn points?

very positive	positive	neutral	negative	very negative
_____	_____	_____	_____	_____

Please explain your answer:_____

_____

_____

_____

2. Some students prefer to have several tests, while others prefer to have just a few. What is your opinion of the number of tests given in this course (there were 5 tests)?

very positive	positive	neutral	negative	very negative
_____	_____	_____	_____	_____

Please explain your answer:_____

_____

_____

_____

3. What is your opinion of the completion date requirements for the book reports and term paper (all had to be completed one or more weeks before the end of the term)?

_____ _____ _____ _____ _____
very positive positive neutral negative very negative

Please explain your answer:_____

_____

_____

4. In order to prepare for each test, class members were permitted to participate in a group study session. What is your opinion of this option?

_____ _____ _____ _____ _____
very positive positive neutral negative very negative

Please explain your answer:_____

_____

_____

_____

Three ways of learning the course material were used: reading, lectures, and video tapes. What is your opinion of each of the following, as a way for **YOU** to learn?

5. Reading the textbook:

_____ _____ _____ _____ _____
very positive positive neutral negative very negative

Please explain your answer:_____

_____

_____

6. Listening to lectures:

_____ _____ _____ _____ _____
very positive positive neutral negative very negative

Please explain your answer:_____

_____

_____

7. Watching video tapes:

_____ _____ _____ _____ _____
very positive positive neutral negative very negative

Please explain your answer:_____

_____

_____

8. At the beginning of the course, each student was asked to complete a Student Learning Plan. What is your opinion of this method?

_____ _____ _____ _____ _____
very positive positive neutral negative very negative

Please explain your answer:_____

_____

_____

_____

What did you understand the **PURPOSE** of the Student Learning Plan to be?

_____

_____

_____

_____

_____

Your answers to the following questions will help me to further evaluate the effectiveness of the course and this way of teaching it.

How many tests have you taken, so far? _____
number

Do you plan to take the final exam? _____
yes/no

How many test points have you accumulated, up to this point?

_____
total points (Ask to see the grade book, if you are unsure.)

How many group study sessions have you participated in, so far?

_____
number

Do you plan to participate in the group study session before the final exam?

_____
yes/no

How many book reports did you complete? _____
number

Did you complete a term paper? _____
yes/no

Were you able to complete everything you included in your Student Learning Plan?

_____
yes/no

Please explain your answer:_____

_____

_____

_____

Based on your grades up to this point, what **FINAL GRADE** do you expect to receive in this course?

_____
final grade

What is your age? _____
(This information will help me to understand the needs of **ALL** age groups.)

THANK YOU. *Please make any other comments that you may consider helpful:*

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

AGAIN, THANK YOU FOR YOUR ASSISTANCE!

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